

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

3COM CORP,

No C 03-2177 VRW

Plaintiff,

FINAL JURY INSTRUCTIONS

v

REALTEK SEMICONDUCTOR CORP,

Defendant.

/

DUTIES OF JURY TO FIND FACTS AND FOLLOW LAW

Members of the jury, now that you have heard all the evidence and the arguments of the attorneys, it is my duty to instruct you on the law which applies to this case. A copy of these instructions will be available in the jury room for you to consult if you find it necessary.

It is your duty to find the facts from all the evidence in the case. To those facts you must apply the law as I give it to

1 you. You must follow the law as I give it to you in these  
2 instructions whether you agree with it or not. And you must not be  
3 influenced by any personal likes or dislikes, opinions, prejudices  
4 or sympathy. That means that you must decide the case solely on  
5 the evidence before you. You will recall that you took an oath  
6 promising to do so at the beginning of the case.

7 In following these instructions, you must follow all of  
8 them and not single out some and ignore others; they are all  
9 equally important. You must not read into these instructions or  
10 into anything I may have said or done during the trial any  
11 suggestion as to what verdict you should return - that is a matter  
12 entirely up to you.

## PATENTS AT ISSUE

There are four patents in this case. We have referred to them generally as "the 3Com patents." All four patents relate to network interface adapters, which facilitate the transfer of data between a host device (such as a personal computer) and a network. Data transferred between the host and a network must first be formatted into data "packets" or "frames," which are bits of data that have been packaged for transmission according to standardized network protocols. Network interface adapters that are the subject of the 3Com patents include two ports (one to connect to the host computer and another to connect to the network), a buffer memory for temporarily storing packets that are being received from the host and transmitted to a network (or vice versa) and a control logic. Network interface adapters that are the subject of the 3Com patents can be implemented as stand-alone network interface cards, sometimes called NICs, that need to be installed in a computer or may be integrated into circuits that are built directly on the computer motherboard.

United States patent 5,307,459 ("the '459 patent"), entitled "Network adapter with host indication optimization," was filed on July 28, 1992 and issued on April 26, 1994. The named inventors of the '459 patent are Brian Petersen, W Paul Sherer, David R Brown and Lai-Chin Lo. The '459 patent describes and claims network adapters that generate early indication signals to reduce what is known as "interrupt latency." We have sometimes referred to the '459 patent as the "early interrupt" patent.

United States patent 5,434,872 ("the '872 patent"),

1 entitled "Apparatus for automatic initiation of data transmission,"  
2 was filed on July 28, 1992 and issued on July 18, 1995. The named  
3 inventors of the '872 patent are Brian Petersen, David R Brown and  
4 W Paul Sherer. The '872 patent describes and claims network  
5 interface adapters that transmit a data frame to the network before  
6 the entire frame is downloaded into the adapter's memory. We have  
7 sometimes referred to the '872 patent as an "early transmit"  
8 patent.

9 United States patent 5,732,094 ("the '094 patent"),  
10 entitled "Method for automatic initiation of data transmission,"  
11 was filed on September 16, 1996 and issued on March 24, 1998. It  
12 claims priority to the same application as the '872 patent, which  
13 was filed on July 28, 1992. The named inventors of the '094 patent  
14 are Brian Petersen, David R Brown and W Paul Sherer. The '094  
15 patent describes and claims methods of transmitting a data frame to  
16 the network before the entire frame is downloaded into the  
17 adapter's memory. We have also referred to the '094 patent as an  
18 "early transmit" patent.

19 United States patent 6,570,884 ("the '884 patent"),  
20 entitled "Receive filtering for communication interface," was filed  
21 on November 5, 1999 and issued on May 27, 2003. The named  
22 inventors of the '884 patent are Glenn William Connery and Patricia  
23 Cross.

24 The inventors of the 3Com patents assigned their ownership  
25 rights in the 3Com patents to 3Com, so that 3Com is now the owner  
26 of the 3Com patents.  
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## SUMMARY OF PARTIES' CONTENTIONS

I will first give you a summary of each side's contentions in this case. I will then tell you what each side must prove to win on each of its contentions.

3Com seeks money damages from Realtek for allegedly infringing the 3Com patents by making, importing, selling and offering for sale within the United States certain network interface adapters that 3Com argues are covered by claim 1 of the '459 patent, claims 10 and 21 of the '872 patent, claims 28 and 47 of the '094 patent and/or claim 1 of the '884 patent. These claims may be referred to as the "asserted claims." 3Com also argues that Realtek has actively induced infringement of the asserted claims by others.

The Realtek products that are alleged to infringe the 3Com patents will be referred to as the "accused Realtek products." Realtek's accused products can be organized into five product groups: I, II, III, IV and V.

3Com alleges that product groups I, II and III infringe claim 1 of the '459 patent, that all of the accused products infringe claims 10 and 21 of the '872 patent, that product groups I and II infringe claims 28 and 47 of the '094 patent and that product groups III, IV and V infringe claim 1 of the '884 patent.

Realtek denies that it has infringed any of the asserted claims of the 3Com patents and argues that, in addition, all of the asserted claims are invalid.

It has already been determined in other proceedings that product groups I, II and III infringe claim 1 of the '459 patent,

1 that all of the accused Realtek products infringe Claim 21 of the  
2 '872 patent and that product groups I and II infringe claim 28 of  
3 the '094 patent. You need not, therefore, consider the issue of  
4 direct infringement with respect to those products and claims. You  
5 will, however, have to consider 3Com's contention that Realtek  
6 induced infringement of these claims and Realtek's contention that  
7 these claims are invalid.

8           The previous determination of infringement of certain  
9 claims does not indicate an opinion of the court as to the issues  
10 that you are to decide and it should not in any way affect your  
11 consideration of those issues.

12           Your job will be to decide whether any or all of the  
13 accused Realtek products infringe claim 10 of the '872 patent,  
14 whether product group I and product group II infringe claim 47 of  
15 the '094 patent and whether product groups III, IV and V infringe  
16 claim 1 of the '884 patent. In addition, you will need to decide  
17 whether Realtek has induced infringement of any of the asserted  
18 claims and whether any of the asserted claims are invalid.

19           If you decide that any asserted claim is not invalid and  
20 either (1) you decide that such claim has been infringed or (2) it  
21 has already been determined in other proceedings that such claim  
22 was infringed, you will then need to decide any money damages to be  
23 awarded to 3Com to compensate it for the infringement. You will  
24 also need to make a finding whether any infringement of the '459,  
25 '872 and '094 patents was willful. If you decide that any  
26 infringement was willful, that decision should not affect any  
27 damage award you give. I will take willfulness into account in  
28 later proceedings.

## INTERPRETATION OF CLAIMS

I have interpreted the meaning of some of the language in the patent claims involved in this case. You must accept these interpretations as correct. My interpretation of the language should not be taken as an indication that I have a view regarding the issues of infringement and invalidity. The decisions regarding infringement and invalidity are yours to make.

## '459 Patent Claim Terms:

- (1) "buffer" or "buffer memory": a memory for temporary storage of data.
- (2) "alterable storage location": storage location whose value is changeable.
- (3) "indication signal": a signal that indicates a subsequent interrupt.

## '872 and '094 Patent Claim Terms:

- (1) "buffer" or "buffer memory": a memory for temporary storage of data.
- (2) "optimizing the threshold": changing the threshold value to make it as perfect, effective or functional as possible.

## '884 Patent Claim Terms:

- (1) "a buffer, coupled to the first port, storing received packets": a temporary storage device connected to the first port for received packets.

(2) "read and process data in the identified packets from the buffer": the court has interpreted a portion of this term. The term "from the buffer" means "while the packets are in the buffer."



INFRINGEMENT: BURDEN OF PROOF

I will now summarize the patent law applicable to the specific issues in this case. Before you are 3Com's allegations that Realtek has infringed claim 10 of the '872 patent, claim 47 of the '094 patent and claim 1 of the '884 patent. To prove infringement of any claim, 3Com must persuade you that it is more likely than not that Realtek has infringed that claim.

## DIRECT INFRINGEMENT

A patent's claims define what is covered by the patent. A product directly infringes a patent if it is covered by at least one claim of the patent.

Deciding whether a claim has been directly infringed is a two-step process. The first step is to decide the meaning of the patent claim. I have already made that decision and instructed you as to the meaning of certain patent claim terms. The second step is to decide whether an alleged direct infringer has made, used, sold, offered for sale or imported within the United States a product covered by an asserted claim. You, the jury, make the decision.

You must consider each of the asserted claims of the patent individually and decide whether the accused Realtek products infringe that claim.

There are two ways in which a patent claim may be directly infringed. A claim may be "literally" infringed or it may be infringed under the "doctrine of equivalents." The following instructions will provide more detail on these two types of direct infringement.

You should note, however, that what are called "means-plus-function" requirements in a claim are subject to different rules for deciding direct infringement. These separate rules apply to claim 10 of the '872 patent and claim 1 of the '459 patent. I will describe these separate rules shortly.

## LITERAL INFRINGEMENT

In this case, there are two different types of patent claims at issue. The first type is called an apparatus claim. Claim 10 of the '872 patent and claim 1 of the '884 patent are both apparatus claims. To decide whether the accused Realtek products literally infringe these apparatus claims, you must compare the accused Realtek products with each of these claims and determine whether every requirement of a particular claim is included in the accused Realtek products.

The second type of claim is called a method claim. Claim 47 of the '094 patent is a method claim. To decide whether the accused Realtek products literally infringe claim 47 of the '094 patent, you must compare the capability of the accused Realtek products with this claim and determine whether the accused Realtek products are capable of performing every step of the claim.

If the accused Realtek products include every requirement or are capable of performing every step in an asserted claim, the accused Realtek products literally infringe that claim. If, however, the accused Realtek products do not include every requirement or are not capable of performing every step in the asserted claim, the accused Realtek products do not literally infringe that claim. You must decide literal infringement for each asserted claim separately.

## 1 INFRINGEMENT UNDER THE DOCTRINE OF EQUIVALENTS

2  
3 If you decide that the accused Realtek products do not  
4 literally infringe an asserted claim, you must then decide whether  
5 those products infringe that asserted claim under what is called  
6 the "doctrine of equivalents."

7 Under the doctrine of equivalents, the accused Realtek  
8 products can infringe an asserted claim if they include elements or  
9 are capable of performing steps that are equivalent to the  
10 requirements of the asserted claim. If the accused Realtek  
11 products are missing an identical or equivalent element of even one  
12 requirement of the asserted claim, the accused Realtek products  
13 cannot infringe that asserted claim under the doctrine of  
14 equivalents. Thus, in making your decision under the doctrine of  
15 equivalents, you must look at each individual requirement of each  
16 asserted claim and decide whether the accused Realtek products  
17 include an identical or equivalent element to that individual claim  
18 requirement.

19 A part of a product or step of a method is equivalent to  
20 a requirement of an asserted claim if a person of ordinary skill in  
21 the field of network interface technology would think that the  
22 differences between the part or step and the requirement were not  
23 substantial as of the time of the alleged infringement.

24 In order to find infringement under the doctrine of  
25 equivalents, you must find that, from the evidence in the case, any  
26 difference between a requirement of an asserted claim and a part or  
27 step of the product or method is not substantial. One way to  
28 determine whether a difference is substantial is to consider

1 whether, as of the time of the alleged infringement, the part or  
2 step of the product or method performed substantially the same  
3 function, in substantially the same way, to achieve substantially  
4 the same result as the requirement in the patent claim.

5           In deciding whether any difference between a claim  
6 requirement and the product or method is not substantial, you may  
7 consider whether, at the time of the alleged infringement, persons  
8 of ordinary skill in the field would have known of the  
9 interchangeability of the part or step with the claimed  
10 requirement. The known interchangeability between the claim  
11 requirement and the part or step in the product or method is not  
12 necessary to find infringement under the doctrine of equivalents.  
13 However, known interchangeability may support a conclusion that the  
14 difference between the part or step in the product or method and  
15 the claim requirement is not substantial. The fact that a part or  
16 step of the product or method performs the same function as the  
17 claim requirement is not, by itself, sufficient to show known  
18 interchangeability.

19           You may not use the doctrine of equivalents to find  
20 infringement if you find that Realtek's product is the same as what  
21 was in the prior art before the application for the specific patent  
22 or what would have been obvious to persons of ordinary skill in the  
23 field in light of what was in the prior art. A patent holder may  
24 not obtain, under the doctrine of equivalents, protection that it  
25 could not have lawfully obtained from the Patent and Trademark  
26 Office.

27           You may not use the doctrine of equivalents to find  
28 infringement if you find that the subject matter alleged to be

1 equivalent to a requirement of the patent claim was described in  
2 the patent but not covered by any of its claims. The subject  
3 matter described but not claimed must be specific enough that one  
4 of ordinary skill in the art would understand that it was present  
5 in the patent.

## MEANS-PLUS-FUNCTION CLAIMS

I will now describe the separate rules that apply to "means-plus-function" requirements that are used in claim 10 of the '872 patent and claim 1 of the '459 patent. A means-plus-function requirement only covers the specific structures disclosed in a patent specification for performing the claimed function and the equivalents of those specific structures that perform the claimed or equivalent function.

For purposes of this trial, I have interpreted each means-plus-function requirement for you and identified the structure in the patent specification that corresponds to these means-plus-function requirements. In deciding whether 3Com has proven that the accused Realtek products include structures covered by a means-plus-function requirement, you will be asked to decide whether the accused Realtek products have any structure that performs that function. If not, the claim containing that means-plus-function requirement is not infringed.

If you find that the accused Realtek products perform the claimed or equivalent function, you will then be asked to identify the structure in the accused Realtek products that performs this function. After identifying that structure, you must then determine whether that structure is the same as or equivalent to the structures I have identified. If they are the same or equivalent, the means-plus-function requirement is satisfied by that structure of the accused Realtek products. If all the other requirements of the claim are satisfied by structures found in the accused Realtek products, the accused Realtek products infringe the

1 claim.

2 In order to prove that a structure in the accused Realtek  
3 products is equivalent to the structure in the 3Com patents, 3Com  
4 must show that a person of ordinary skill in the field would have  
5 considered that the differences between the structure described in  
6 the 3Com patent and the structure in the accused Realtek products  
7 are not substantial.

8 A means-plus-function requirement can also be met under  
9 the doctrine of equivalents if the function is not the same but is  
10 equivalent or the corresponding structure in the accused product is  
11 later developed technology.

12 I have interpreted each means-plus-function requirement  
13 for you and identified the structure in the patent specification  
14 that corresponds to the means-plus-function requirements.  
15 Specifically, I have identified the structures that perform the  
16 functions identified in claim 10 of the '872 patent:

- 17 (1) "host interface means, having an interface to the host  
18 system, for transferring data between the host system and  
19 the buffer memory": host interface 30, as shown in Fig 2  
20 and described at 4:26-30.
- 21 (2) "means, coupled with the buffer memory and including a  
22 host system alterable threshold store for storing a  
23 threshold value, for monitoring the transferring of data  
24 of a frame to the buffer memory to make a threshold  
25 determination of an amount of data of the frame  
26 transferred to the buffer memory": threshold logic 36 and  
27 threshold store 43, as shown in Fig 2 and described at  
28 4:30-33 and 4:46-47.



- 1 (3) "means, responsive to the threshold determination of the  
2 means for monitoring, for initiating transmission of the  
3 frame, prior to transfer of all the data of the frame to  
4 the buffer memory from the host computer": threshold  
5 logic 36.
- 6 (4) "network interface means, having an interface to the  
7 network transceiver and responsive to the means for  
8 initiating, for transferring data between the buffer  
9 memory and the network transceiver for transmission":  
10 ethernet transmitter module 66 as shown in Fig 4 and  
11 described at 9:45-55.
- 12 (5) "control means, coupled with the network interface means,  
13 for posting status information for use by the host  
14 system, as feedback for optimizing the threshold value":  
15 status information line 44, as shown in Fig 2 and  
16 described at 4:56-60.

17 I have also identified the structures that perform  
18 the functions identified in claim 1 of the '459 patent:

- 19 (1) "means for comparing the counter to the threshold value  
20 in the alterable storage location and generating an  
21 indication signal to the host processor responsive to a  
22 comparison of the counter and the alterable storage  
23 location": threshold logic 10 and host interface logic 8  
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INDIRECT INFRINGEMENT: GENERALLY

3Com also argues that Realtek induced another to infringe the 3Com patents.

Realtek cannot induce infringement unless 3Com proves that someone other than Realtek directly infringes the patent claim by making, using, selling, offering for sale or importing a product within the United States that includes all of the requirements of the asserted claims or that someone other than Realtek directly infringes a method claim by practicing the claimed method in the United States. If there is no direct infringement, Realtek cannot have induced infringement.

## INDUCING PATENT INFRINGEMENT

3Com argues that Realtek has actively induced another to infringe the 3Com patents. In order for there to be inducement of infringement by Realtek, someone else must directly infringe a claim of the 3Com patents; if there is no direct infringement by anyone, there can be no induced infringement. In order to be liable for inducement of infringement, Realtek must:

(1) have intentionally taken action that actually induced direct infringement by another;

(2) have been aware of the 3Com patent and

(3) have known or should have known that its actions would cause direct infringement by another.

In order to prove induced infringement, 3Com must either prove that the accused Realtek products necessarily infringe the 3Com patents or prove acts of direct infringement by others that were induced by Realtek. 3Com may prove the number of direct acts of infringement of the 3Com patent or it may prove inducement of infringement by other infringers across a category of infringers.

## WILLFUL INFRINGEMENT

In this case, 3Com argues that Realtek willfully infringed the 3Com patents.

To prove willful infringement, 3Com must first persuade you that the Realtek infringed a valid and enforceable claim of the 3Com patents. The requirements for proving such infringement were discussed in my prior instructions.

In addition, to prove willful infringement, 3Com must persuade you that it is highly probable that Realtek acted with reckless disregard of the 3Com patent claims.

To demonstrate such "reckless disregard," Realtek must satisfy a two-part test. The first part of the test is objective. 3Com must persuade you that Realtek acted despite an objectively high likelihood that its actions constituted infringement of a valid and enforceable patent. The state of mind of Realtek is not relevant to this inquiry. You should focus on whether a reasonable person in the position of Realtek, after learning of the patent, could have reasonably believed that it did not infringe or reasonably believed the patent was invalid or unenforceable. If a reasonable person in the position of Realtek could not have held such belief, then you need to consider the second part of the test.

The second part of the test depends on the state of mind of Realtek. 3Com must persuade you that Realtek actually knew, or it was so obvious that Realtek should have known, that its actions constituted infringement of a valid and enforceable patent.

In deciding whether Realtek acted with reckless disregard, you should consider all of the facts surrounding the

1 alleged infringement including, but not limited to, the following:

2 (1) Whether Realtek acted in a manner consistent with  
3 the standards of commerce for its industry and

4 (2) Whether Realtek intentionally copied a product of  
5 3Com covered by the patent.

## INVALIDITY: BURDEN OF PROOF

I will now instruct you on the rules you must follow in deciding whether Realtek has proven that the asserted claims of the 3Com patents are invalid. Before discussing the specific rules, I want to remind you about the standard of proof that applies to this defense. Every patent granted by the United States Patent and Trademark Office is presumed valid. Therefore, each claim of the 3Com patents in this lawsuit is presumed valid notwithstanding the validity of any other claims.

To prove invalidity of any patent claim, the standard of proof is clear and convincing evidence. In other words, Realtek must persuade you that it is highly probable that the claim is invalid. This is a higher standard of proof than the "more likely than not" or "preponderance of the evidence" standard you will apply to 3Com's infringement claims.

I will now instruct you on the invalidity issues that you will have to decide in this case.

## LEVEL OF ORDINARY SKILL

To find that it is highly probable that a patent claim is invalid by anticipation, the statutory bar or obviousness, you must first determine the level of ordinary skill in the field of network interface technology. The level of ordinary skill is typically expressed as the educational and work background that one of ordinary skill in the field would have. The level of ordinary skill is not the level of skill of someone who has personal or special experience with the particular prior art reference at issue.

It is up to you to decide the level of ordinary skill in the field of network interface technology. You may determine the level of ordinary skill in the field of network interface technology based on direct testimony, if any, on the level of skill in the field or you may infer the level of ordinary skill based on other evidence presented. You should consider all the evidence introduced at trial in making this decision, including:

- (1) the levels of education and experience of persons working in the field;
- (2) the types of problems encountered in the field and prior art solutions to those problems;
- (3) rapidity with which innovations are made and
- (4) the sophistication of the technology.

If you are unable to determine the level of ordinary skill in the field of network interface technology based on the evidence presented in this trial, then you may not find that any patent claims are invalidated by anticipation, the statutory bar or

**United States District Court**  
For the Northern District of California

1 obviousness.

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## ANTICIPATION

A patent claim is invalid if the claimed invention is not new. For the claim to be invalid because it is not new, all of its requirements must have existed in a single device or method that predates the claimed invention, or must have been described in a single previous publication or patent that predates the claimed invention. In patent law, these previous devices, methods, publications or patents are called "prior art references." If a patent claim is not new we say it is "anticipated" by a prior art reference.

The description in the written reference does not have to be in the same words as the claim, but all of the requirements of the claim must be present in the reference, so that someone of ordinary skill in the field of network interface technology, looking at that one reference would be able to make and use the claimed invention.

Here is a list of the ways that Realtek can show that a patent claim was not new:

(1) If the claimed invention was already publicly known or publicly used by others in the United States before the 3Com inventors conceived of the invention;

(2) If the claimed invention was already patented or described in one printed publication anywhere in the world before the 3Com inventors conceived of the invention. A reference is a "printed publication" if it is publicly accessible to those interested in the field, even if it is difficult to find;

(3) If the claimed invention was already conceived by

1 someone else in the United States before the inventors of the 3Com  
2 patents conceived it, if that other person had not abandoned the  
3 claimed invention or kept it secret or

4 (4) If the claimed invention was already described in  
5 another issued United States patent or published United States  
6 patent application that was based on a patent application filed  
7 before the earlier of the application filing date for the 3Com  
8 patent or the date of conception for the 3Com patent.

9 3Com and Realtek dispute who is the first inventor for  
10 some of the patent claims. The person who first conceived of the  
11 claimed invention and first reduced it to practice is the first  
12 inventor. If one person conceived of the claimed invention first,  
13 but reduced to practice second, that person is the first inventor  
14 only if that person (a) began to reduce the claimed invention to  
15 practice before the other party conceived of it and (b) continued  
16 to work diligently to reduce it to practice. A claimed invention  
17 is "reduced to practice" when it has been tested sufficiently to  
18 show that it will work for its intended purpose or when it is fully  
19 described in a filed patent application.

20 Since the date of conception is in dispute, you must  
21 determine a date of conception for each of 3Com's claimed  
22 inventions and each allegedly prior invention. Conception is the  
23 mental part of an inventive act and is proven when the invention is  
24 shown in its complete form by drawings, disclosure to another or  
25 other forms of evidence presented at trial. An inventor's  
26 testimony, standing alone, is insufficient to prove conception; it  
27 requires corroboration. The testimony of one co-inventor cannot be  
28 used to corroborate the testimony of another co-inventor.

1 Corroboration may be provided by documentary evidence or testimony  
2 of non-inventors.

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## STATUTORY BAR

A patent claim is invalid if the patent application was not filed within the time required by law. This is called a "statutory bar." For a patent claim to be invalid by a statutory bar, all of its requirements must have been present in one prior art reference dated more than one year before the patent application was filed.

For a claim to be invalid because of a statutory bar, all of the claimed requirements must have been either (1) disclosed in a single prior art reference, (2) implicitly disclosed in a reference to one skilled in the field or (3) must have been present in the reference, whether or not that was understood at the time. The disclosure in a reference does not have to be in the same words as the claim, but all the requirements must be there, either described in enough detail or necessarily implied, to enable someone of ordinary skill in the field of network interface technology looking at the reference to make and use the claimed invention.

Here is a list of ways Realtek can show that the patent application was not timely filed:

(1) If the claimed invention was already patented or described in a printed publication anywhere in the world more than one year before the filing date of the patent application;

(2) If the claimed invention was already being openly used in the United States more than one year before the filing date of the patent application and that use was not primarily an experimental use controlled by the inventor to test whether the

1 invention worked for its intended purpose or

2 (3) If a device or method using the claimed invention was  
3 sold or offered for sale in the United States, and that claimed  
4 invention was ready for patenting, more than one year before the  
5 filing date of the patent application.

6 The claimed invention is not being sold or offered for  
7 sale if the 3Com shows that the sale or offer for sale was  
8 primarily experimental. The claimed invention is ready for  
9 patenting if it was actually built or if the inventor had prepared  
10 drawings or other descriptions of the claimed invention that were  
11 sufficiently detailed to enable a person of ordinary skill in the  
12 field to make and use the invention based on them.

## OBVIOUSNESS

Not all innovations are patentable. A patent claim is invalid if the claimed invention would have been obvious to a person of ordinary skill in the field at the time the application was filed. This means that even if all of the requirements of the claim cannot be found in a single prior art reference that would anticipate the claim or constitute a statutory bar to that claim, a person of ordinary skill in the field of network interface technology who knew about all this prior art would have come up with the claimed invention.

A patent claim composed of several elements is not proved obvious merely by demonstrating that each of its elements was independently known in the prior art. In evaluating whether such a claim would have been obvious, you may consider whether Realtek has identified a reason that would have prompted a person of ordinary skill in the field to combine the elements or concepts from the prior art in the same way as in the claimed invention. If you find that there is no evidence that a person of ordinary skill in the field of network interface technology would combine the elements from separate prior art references in the same way as in the claimed invention, then you cannot find that the patent claim is invalid based on obviousness.

There is no single way to define the line between true inventiveness on one hand (which is patentable) and the application of common sense and ordinary skill to solve a problem on the other hand (which is not patentable). For example, market forces or other design incentives may be what produced a change, rather than

1 true inventiveness. You may consider whether the change was merely  
2 the predictable result of using prior art elements according to  
3 their known functions, or whether it was the result of true  
4 inventiveness. You may also consider whether there is some  
5 teaching or suggestion in the prior art to make the modification or  
6 combination of elements claimed in the patent. However, you must  
7 be careful not to determine obviousness using the benefit of  
8 hindsight; many true inventions might seem obvious after the fact.  
9 You should put yourself in the position of a person of ordinary  
10 skill in the field at the time the claimed invention was made and  
11 you should not consider what is known today or what is learned from  
12 the teaching of the patent.

13           The ultimate conclusion of whether a claim is obvious  
14 should be based upon your determination of several factual  
15 decisions. First, you must decide the level of ordinary skill in  
16 the field that someone would have had at the time the claimed  
17 invention was made. Second, you must decide the scope and content  
18 of the prior art. Third, you must decide what difference, if any,  
19 existed between the claimed invention and the prior art. Finally,  
20 you should consider any of the following factors that you find have  
21 been shown by the evidence:

22           (1) commercial success of a product due to the merits of  
23 the claimed invention;

24           (2) a long felt need for the solution provided by the  
25 claimed invention;

26           (3) unsuccessful attempts by others to find the solution  
27 provided by the claimed invention;

28           (4) copying of the claimed invention by others;

1           (5) unexpected and superior results from the claimed  
2 invention;

3           (6) acceptance by others of the claimed invention as  
4 shown by praise from others in the field or from the licensing of  
5 the claimed invention;

6           (7) other evidence tending to show nonobviousness;

7           (8) independent invention of the claimed invention by  
8 others before or at about the same time as the named inventor  
9 thought of it and

10          (9) other evidence tending to show obviousness.

11          Although you should consider any evidence of these  
12 factors, the relevance and importance of any of them to your  
13 decision on whether the claimed invention would have been obvious  
14 is up to you.



## DAMAGES: BURDEN OF PROOF

I will now instruct you about the measure of damages. By instructing you on damages, I am not suggesting which party should win on any issue. If you find that Realtek infringed any valid claim of the 3Com patents or if you find that any of the 3Com patent claims determined to be infringed in earlier proceedings are not invalid, you must then determine the amount of money damages to be awarded to 3Com to compensate it for the infringement.

The amount of those damages must be adequate to compensate 3Com for the infringement. A damages award should put the patent holder in approximately the financial position it would have been in had the infringement not occurred, but in no event may the damages award be less than a reasonable royalty. You should keep in mind that the damages you award are meant to compensate the patent holder and not to punish an infringer.

3Com has the burden to persuade you of the amount of its damages. You should award only those damages that 3Com more likely than not suffered. While 3Com is not required to prove its damages with mathematical precision, it must prove them with reasonable certainty. 3Com is not entitled to damages that are remote or speculative.

## REASONABLE ROYALTY

The damages in this case will be based on the reasonable royalty measure of damages.

A royalty is a payment made to a patent holder in exchange for rights to make, use or sell the claimed invention. A reasonable royalty is the payment that would have resulted from a negotiation between a patent holder and the infringer taking place at the time when the infringing sales first began. In considering the nature of this hypothetical negotiation, the focus is on what the expectations of the patent holder and infringer would have been had they entered into an agreement at that time and acted reasonably in their negotiations. However, you must assume that both parties believed the patent was valid and infringed. In addition, you must assume that patent holder and infringer were willing to enter into an agreement; your role is to determine what that agreement would have been. The test for damages is what royalty would have resulted from the hypothetical negotiation and not simply what either party would have preferred. You may not limit or increase the royalty based on the actual profits Realtek made.

## DAMAGES: DATE OF COMMENCEMENT

For the method claims in this case - claims 28 and 47 of the '094 patent - damages that 3Com may be awarded commence on March 24, 1998, the date the patent issued.

For the apparatus claims in this case - claim 1 of the '459 patent, claims 10 and 21 of the '872 patent and claim 1 of the '884 patent - damages that 3Com may be awarded commence on the date when Realtek has both infringed and been notified of the 3Com patents.

For the '884 patent, 3Com and Realtek agree that damages for any infringement commenced on July 13, 2004, the date 3Com filed its claims against Realtek.

For the '459 and '872 patents, 3Com and Realtek dispute when Realtek was notified of alleged infringement. Realtek may have been notified of the 3Com patents in one of three ways:

(1) Realtek is deemed to be notified of the 3Com patents if substantially all of the products made or licensed by 3Com that practice those patents is marked with the patent number. 3Com and Realtek dispute whether and when 3Com began marking substantially all of its products.

(2) Realtek is notified of the 3Com patents if it receives actual notice of the 3Com patents and the specific Realtek products alleged to infringe the 3Com patents. 3Com and Realtek dispute whether and when Realtek received actual notice.

(3) If 3Com does not prove that Realtek received notice through marking or actual notice prior to the filing of 3Com's claims against Realtek, then Realtek is deemed to be notified of

**United States District Court**  
For the Northern District of California

1 the '459 and '872 patents on July 13, 2004.  
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WHAT IS EVIDENCE

The evidence you are to consider in deciding what the facts are consists of:

1. The sworn testimony of any witness;
2. The exhibits which are received into evidence and
3. Any facts to which the lawyers stipulate.

WHAT IS NOT EVIDENCE

The following things are not evidence, and you must not consider them as evidence in deciding the facts of this case:

1. Statements and arguments of the attorneys;
2. Questions and objections of the attorneys;
3. Testimony that I instruct you to disregard and
4. Anything you may see or hear when the court is not in session even if what you see or hear is done or said by one of the parties or by one of the witnesses.

DIRECT AND CIRCUMSTANTIAL EVIDENCE

Evidence may be direct or circumstantial. Direct evidence is direct proof of a fact, such as testimony by a witness about what that witness personally saw or heard or did. Circumstantial evidence is proof of one or more facts from which you could infer another fact. You should consider both kinds of evidence. The law makes no distinction between the weight to be given to either direct or circumstantial evidence. It is for you to decide how much weight to give to any evidence.

ADMISSIONS

In addition to the evidence that has been presented and any facts that the lawyers have stipulated to, you have seen certain facts that have been deemed to be admissions of a party in the case. Those, too, are facts that you may take as established for purposes of finding of facts in this case.



## RULING ON OBJECTIONS

There are rules of evidence that control what can be received into evidence. During trial, when a lawyer asked a question or offered an exhibit into evidence and a lawyer on the other side thought that it was not permitted by the rules of evidence, that lawyer objected. If I overruled the objection, the question was answered or the exhibit received. If I sustained the objection, the question was not answered or the exhibit was not received. You must ignore the questions to which I sustained objections and must not guess what the answer might have been.

Sometimes I ordered that evidence be stricken from the record and that you disregard or ignore the evidence. That means that when you are deciding the case, you must not consider the evidence that I told you to disregard.

CREDIBILITY OF WITNESSES

In deciding the facts in this case, you may have to decide which testimony to believe and which testimony not to believe. You may believe everything a witness says, part of it or none of it.

In considering the testimony of any witness, you may take into account:

1. The opportunity and ability of the witness to see, hear or know the things testified to;
2. The witness's memory;
3. The witness's manner while testifying;
4. The witness's interest in the outcome of the case and any bias or prejudice;
5. Whether other evidence contradicted the witness's testimony;
6. The reasonableness of the witness's testimony in light of all the evidence and
7. Any other factors that bear on believability.

The weight of the evidence as to a fact does not necessarily depend on the number of witnesses who testify.

DISCREPANCIES IN TESTIMONY

Discrepancies in a witness's testimony or between such witness's testimony and that of other witnesses, if there were any, do not necessarily mean that any witness should be discredited. Failure of recollection is common. Innocent misrecollection is not uncommon. Two persons witnessing an incident or a transaction often will see or hear it differently. You should consider whether a discrepancy pertains to an important matter or only to something trivial.

OPINION EVIDENCE (EXPERT WITNESSES)

During the course of the trial you heard testimony from persons who, because of education or experience, were permitted to state opinions and the reasons for their opinions. These individuals are known as "expert witnesses."

Opinion testimony should be judged just like any other testimony. You may accept it or reject it, and give it as much weight as you think it deserves, considering the witness's education and experience, the reasons given for the opinion and all the other evidence in the case.

TESTIMONY THROUGH INTERPRETER

Some witnesses who do not speak English or are more proficient in another language testified through an official court interpreter. Witnesses are not to be considered any more or less credible simply because they testified in another language. Although some of you may know Chinese, it is important that all jurors consider the same evidence. Therefore, you must accept the interpreter's translation of the witness's testimony. You must disregard any different meaning.

## BURDEN OF PROOF

When a party has the burden of proof on any claim or affirmative defense by a preponderance of the evidence, it means you must be persuaded by the evidence that the claim or affirmative defense is more likely true than not true. Put another way, "preponderance of the evidence" means evidence that has more convincing force than that opposed to it.

3Com must prove infringement by the preponderance of the evidence or "more likely than not" standard.

Clear and convincing evidence is a higher burden of proof. It requires that you be persuaded that it is highly probable that what the party seeks to prove is true.

3Com must prove willful infringement and Realtek must prove invalidity by the clear and convincing evidence or "highly probable" standard.

You may have heard of a burden of proof that is used in criminal cases called "beyond a reasonable doubt." That requirement is the highest burden of proof and does not apply to a patent case; hence, you should completely ignore it.

If the evidence is so evenly balanced that you are unable to say that the evidence on either side of an issue predominates, your finding on that issue must be against the party who had the burden of proving it.

You should base your decision on all of the evidence, regardless of which party presented it.

CHARTS AND SUMMARIES NOT RECEIVED IN EVIDENCE

Certain charts and summaries, sometimes referred to as demonstratives or animations, that have not been received in evidence have been shown to you in order to help explain evidence in the case. They are not themselves evidence or proof of any facts. If they do not correctly reflect the facts or figures shown by the evidence in the case, you should disregard these charts and summaries and determine the facts from the underlying evidence.

CHARTS AND SUMMARIES IN EVIDENCE

Certain charts and summaries have been received into evidence to illustrate information brought out in the trial. Charts and summaries are only as good as the underlying evidence that supports them. You should, therefore, give them only such weight as you think the underlying evidence deserves.



DUTY TO DELIBERATE

When you begin your deliberations, you should elect one member of the jury as your foreperson. That person will preside over the deliberations and speak for you here in court.

You will then discuss the case with your fellow jurors to reach agreement if you can do so. Your verdict must be unanimous.

Each of you must decide the case for yourself, but you should do so only after you have considered all the evidence, discussed it fully with the other jurors and listened to the views of your fellow jurors.

Do not be afraid to change your opinion if the discussion persuades you that you should. But do not come to a decision simply because other jurors think it is right.

It is important that you attempt to reach a unanimous verdict but, of course, only if each of you can do so after having made your own conscientious decision. Do not change an honest belief about the weight and effect of the evidence simply to reach a verdict.



USE OF NOTES

Some of you have taken notes during the trial. Whether or not you took notes, you should rely on your own memory of what was said. Notes are only to assist your memory. You should not be overly influenced by your notes.

## COMMUNICATION WITH COURT

If it becomes necessary during your deliberations to communicate with me, you may send a note through the clerk or court security officer, signed by your foreperson or by one or more members of the jury. No member of the jury should ever attempt to communicate with me except by a signed writing; and I will communicate with any member of the jury on anything concerning the case only in writing or orally here in open court. If you send out a question, I will consult with the parties before answering it, which may take some time. You may continue your deliberations while waiting for the answer to any question. Remember that you are not to tell anyone - including me - how the jury stands, numerically or otherwise, until after you have reached a unanimous verdict or have been discharged. Do not disclose any vote count in any note to the court.

RETURN OF VERDICT

A verdict form has been prepared for you. After you have reached unanimous agreement on a verdict, your foreperson will fill in the form that has been given to you, sign and date it and advise the clerk or court security officer that you are ready to return to the courtroom.

Dated: April 6, 2008



VAUGHN R WALKER  
United States District Chief Judge